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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,559	01/23/2004	Katsunori Takada	K06-165935M/TBS	3219

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EXAMINER

MCNELIS, KATHLEEN A

ART UNIT PAPER NUMBER

1742

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/762,559	TAKADA ET AL.	
	Examiner	Art Unit	
	Kathleen A. McNelis	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Claims Status

Claims 1-19 remain for examination wherein claims 1, 5, 9 and 17 are amended.

Acknowledgement of RCE

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.115, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/8/2006 has been entered.

Status of Previous Rejections

The previous rejections of claims 1-5 and 15 under 35 U.S.C. 102(b) as being anticipated by Iguchi et al. (U.S. Pat. No. 6,270,593) are maintained.

The previous rejection of claims 9 to 14 and 16 to 19 under 35 U.S.C. 103(a) as being anticipated by Iguchi et al. (U.S. Pat. No. 6,270,593) are maintained.

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1 to 8 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Iguchi et al. (U.S. Pat. No. 6,270,596).

Iguchi et al. is applied as set forth in paragraphs 1-6 of the 12/8/2006 Office Action.

Further, with regard to the amendments to claims 1 and 5: While Iguchi et al. does not disclose that the steel comprises a three-phase texture of ferrite + pearlite + bainite, such would be the case since:

1. The steel composition is the same as the instant claimed invention as discussed in the 12/8/2006 office action, and
2. The processing step includes heating during rolling or forging up to a temperature of 1050 ° C (col. 5 lines 1-6) which examiner asserts is the same or substantially similar to the process disclosed by the instant invention of "...having been hot rolled..."

and would therefore, in the absence of evidence to the contrary, produce the same microstructure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 to 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iguchi et al. (U.S. Pat. No. 6,270,596).

Iguchi et al. is applied as set forth in the rejection of claims 1 to 8 and 15 above under 35 U.S.C. 102(b).

Alternatively, Iguchi et al. does not disclose that the steel comprises a three-phase texture of ferrite + pearlite + bainite, such would be expected since:

1. The steel composition is the same as the instant claimed invention as discussed in the 12/8/2006 office action, and
2. The processing step includes heating during rolling or forging up to a temperature of 1050 ° C (col. 5 lines 1-6) which examiner asserts is the same or substantially similar to the process disclosed by the instant invention of "...having been hot rolled..."

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and would therefore, in the absence of evidence to the contrary, one of ordinary skill in the art would expect the process to produce the same microstructure.

Claims 9 to 14 and 16 to 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iguchi et al. (U.S. Pat. No. 6,270,596).

Iguchi et al. is applied as set forth in paragraphs 7-11 of the 12/8/2005 Office Action.

Further, regarding the amendments to claims 9 and 17, while Iguchi et al. does not disclose that the steel comprises a three-phase texture of ferrite + pearlite + bainite, such would be expected since:

1. The steel composition is the same as the instant claimed invention as discussed in the 12/8/2006 office action, and
2. The processing step includes heating during rolling or forging up to a temperature of 1050 ° C (col. 5 lines 1-6) which examiner asserts is the same or substantially similar to the process disclosed by the instant invention of "...having been hot rolled..."

and would therefore, in the absence of evidence to the contrary, one of ordinary skill in the art would expect the process to produce the same microstructure.

Response to Arguments

Applicant's arguments filed 6/8/2006 have been fully considered but they are not persuasive.

Applicant's arguments are summarized as follows:

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1. Iguchi et al. does not disclose a 3-phase microstructure of ferrite + pearlite + bainite in a high strength pinion shaft which has not been refined by high frequency hardening.
2. Table 1 of Iguchi does not suggest that the steels are hot rolled to obtain the claimed tissue texture.

Examiner's responses are as follows:

1. Examiner's position on the microstructure is stated above in the grounds for rejection. Examiner maintains the position stated on page 5 of the 12/8/2005 Office Action that the disclosed high strength shaft includes a pinion shaft. Applicant has not included the limitation that the shaft has not been refined by high frequency hardening in the claims, and the preamble uses "comprising", therefore refining with high frequency hardening is not excluded by the claim limitations.
2. The claim language does not include the term "tissue texture", nor is this a recognized metallurgical term known in the art. Iguchi et al. discloses heating during rolling to a temperature of up to 1050 ° C (col. 5 lines 1-6) which examiner asserts is the same or substantially similar to the process disclosed by the instant invention of "hot rolling."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen A. McNelis whose telephone number is 571- 272-3554. The examiner can normally be reached on M-F 8:00 AM to 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/10/2006

/KAM




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